

REMARKS

Claims 12, 17-19 and 21-24 have been amended to improve form and claims 34-37 have been canceled without prejudice or disclaimer. Claims 1-33 are now pending in this application.

Initially, the applicants acknowledge, with appreciation, the indication that claims 29-33 have been allowed and that claims 2, 3, 7, 8, 10, 11, 16 and 26-28 would be allowable if rewritten in independent form.

Claims 17, 18 and 22 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Qureshi et al. (U.S. Patent No. 5,974,480; hereinafter Qureshi). The rejection is respectfully traversed.

Claim 17, as amended, recites features previously recited in claim 19, which was not rejected based on Qureshi. Accordingly, withdrawal of the rejection of claim 17 based on Qureshi is respectfully requested.

Claims 18 and 22 are dependent on claim 17 and are believed to be allowable over Qureshi for at least the reasons claim 17 is allowable over Qureshi. Accordingly, withdrawal of the rejection and allowance of claims 18 and 22 are respectfully requested.

Claims 19-21, 23 and 24 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Seshan et al. (U.S. Patent No. 6,145,027; hereinafter Seshan). The rejection is respectfully traversed.

Initially, the applicants note that claims 19-21 are dependent on claim 17, which was not rejected under 35 U.S.C. § 102 based on Seshan. Since claim 17 has not been alleged to be anticipated by Seshan, dependent claims 19-21 cannot be anticipated by Seshan. Therefore,

claims 19-21 cannot be properly rejected 35 U.S.C. § 102 based on Seshan. Accordingly, withdrawal of the rejection and allowance of claims 19-21 are respectfully requested.

Claim 23, as amended, recites features similar to claims 1 and 2. For example, claim 23, as amended, recites a method for writing data in a network device that includes storing a data unit at a first address identified by an address register, determining whether the first address differs from an address associated with at least one other stored data unit by a first value and initiating a corrective action when the first address differs from the address associated with the at least one other stored data unit by at least the first value. Since claims 1 and 2 were not rejected based on Seshan, the applicants assume that claim 23 as amended is allowable over Seshan. In any event, Seshan does not disclose or suggest each of the features of amended claim 23.

Claim 24 is dependent on claim 23 and is believed to be allowable over Seshan for at least the reasons claim 23 is allowable. Accordingly, withdrawal of the rejection and allowance of claim 24 are respectfully requested.

Claims 1, 4-6, 9, 12-15 and 25 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Niida et al. (U.S. Patent Publication No. 2003/0156093; hereinafter Niida). The rejection is respectfully traversed.

Claim 1 recites a system for writing data that includes a memory configured to store data units; at least one memory controller configured to receive a first write request associated with a data unit, store the data unit in the memory, and transmit a first reply including a first address where the data unit is stored. The system also includes control logic configured to receive the first reply and determine whether the first address differs from an address included

in at least one other reply by at least a first value. Niida does not disclose or suggest these features.

For example, the Office Action admits that Niida does not disclose control logic configured to determine whether a first address differs from an address included in at least one other reply by at least a first value (Office Action – page 5). The Office Action, however, states that Niida discloses that “the destination_offset, i.e., first address, may be the same for all connections or different for different connections (page 14, paragraph 287) and that if they are different, a plurality of connections can efficiently be processed in parallel” (Office Action – page 5).

The applicants respectfully assert that the use of the destination offset in Niida is not at all related to determining whether a first address (included in a first reply) differs from an address included in at least one other reply by at least a first value, as recited in claim 1. For example, Niida discloses that a destination offset may be used to designate a memory space provided in a destination node 304 (Niida – page 5, paragraph 98). Therefore, Niida merely discloses storing a conventional destination offset to identify a particular memory space.

Niida at page 14, paragraph 287, as discussed in the Office Action, discloses that destination offset field 507 may be set to the same value in all connections or different values may be set in the connections. This portion of Niida also discloses that when different values are set, asynchronous broadcast packets from a plurality of connections can be efficiently processed in parallel. This portion of Niida, however, does not suggest determining whether a first address (included in a first reply) that identifies where a data unit is stored differs from an address included in at least one other reply by at least a first value, as required by claim 1. In contrast, this portion of Niida merely discloses that offset values identifying an address space

in a destination node may be set to the same value or different values. The applicants respectfully assert that this portion of Niida, or any other portion, is not at all related to determining whether a first address differs from an address included in at least one other reply by at least a first value, as recited in claim 1.

The Office Action also states that based on the teachings of Niida, it would have been obvious to determine whether an offset address of a connection is different from the offset address of an existing connection in order to decide whether parallel operations can be conducted and that Niida discloses that connections processed in parallel are efficient (Office Action – pages 5-6). The applicants respectfully disagree.

First, the applicants assert that deciding whether parallel operations can be conducted in Niida would still not involve determining whether a first address (included in a first reply) that identifies where a data unit is stored differs from an address included in at least one other reply by at least a first value, as required by claim 1. In contrast, as best understood by the applicants, if Niida wanted to allow packets to be processed in parallel, Niida would just set the appropriate values in destination offset field 507 for the various connections. This would not involve determining whether an offset value included in a first reply differs from an offset value in another reply by at least a first value.

For at least these reasons, Niida does not disclose or suggest each of the features of claim 1. Accordingly, withdrawal of the rejection and allowance of claim 1 are respectfully requested.

Claims 4-6 are dependent on claim 1 and are believed to be allowable for at least the reasons claim 1 is allowable. In addition, these claims recite additional features neither disclosed nor suggested by Niida.

For example, claim 6 recites that the at least one memory controller is configured to receive a second write request indicating that a value in its address register is outside a predetermined range, store a second data unit associated with the second write request, and increment its address register by a second predetermined value after the second data unit is stored. The Office Action states that Niida discloses these features and points to Fig. 12, 407 and Fig. 5, 514 for support (Office Action – page 6). The applicants respectfully disagree.

Niida discloses that after receiving the acknowledgement packet #1, source node 302 increments the sequence number and transfers asynchronous broadcast packets including the next segment data to destination 304 (Niida – page 13, paragraph 255 and Fig. 12, line 407). Niida discloses that field 514 is a sequence number field (Niida – Fig. 5). Niida also discloses that the destination node 304 can monitor continuity of segment data successively subjected to asynchronous broadcast transactions by the sequence number, and when an inequality occurs, the destination node 304 can request for resend based on the sequence number (Niida – page 15, paragraph 297). These portions of Niida do not disclose or suggest that a memory controller receives a second write request indicating that a value in its address register is outside a predetermined range, stores a second data unit associated with the second write request, and increments its address register by a second predetermined value after the second data unit is stored, as required by claim 6. In contrast, these portions of Niida merely disclose incrementing a sequence number and requesting a resend of data when an inequality associated with the sequence number occurs.

For at least these additional reasons, withdrawal of the rejection and allowance of claim 6 are respectfully requested.

Claim 9 recites features similar to features recited in claim 1. For reasons similar to those discussed above with respect to claim 1, Niida does not disclose or suggest each of the features of claim 9. Accordingly, withdrawal of the rejection and allowance of claim 9 are respectfully requested.

Claims 12-15 are dependent on claim 9 and are believed to be allowable for at least the reasons claim 9 is allowable. In addition, these claims recite additional features not disclosed or suggested by Niida.

For example, claim 14 recites features similar to features recited in claim 6. For reasons similar to those discussed above with respect to claim 6, withdrawal of the rejection and allowance of claim 14 are respectfully requested.

Claim 15 recites that the method further includes transmitting a second reply including a second address where the second data unit is stored and determining whether the second address differs from an address included in at least one other reply by less than a second value.

The Office Action states that Niida discloses these features and points to Figs. 3 and 12 and element 405 for support (Office Action – page 7). The applicants respectfully disagree.

Fig. 3 of Niida illustrates a controller 300, source 302 and destination 304. Fig. 12 of Niida illustrates the flow of data among controller 300, source 302 and destination 304. Element 405 in Fig. 12 illustrates an accepted response corresponding to the send request packet (Niida – page 13, paragraph 251). None of these portions of Niida, or any other portions, discloses or suggests transmitting a second reply including a second address where a second data unit is stored and determining whether the second address differs from an address included in at least one other reply by less than a second value, as required by claim 15.

For at least these additional reasons, withdrawal of the rejection and allowance of claim 15 are respectfully requested.

Claim 25 recites features similar to features recited in claim 1. For reasons similar to those discussed above with respect to claim 1, Niida does not disclose or suggest each of the features of claim 25. Accordingly, withdrawal of the rejection and allowance of claim 25 are respectfully requested.

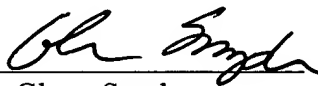
CONCLUSION

In view of the foregoing amendments and remarks, the applicants respectfully request withdrawal of the outstanding rejections and the timely allowance of this application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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